

5-23-74  
12.3.8v.3

MEMORANDUM

CHECK  
INFORMATION \_\_\_\_\_  
FOR ACTION \_\_\_\_\_  
PERMIT \_\_\_\_\_  
OTHER \_\_\_\_\_

TO: Ken Mauermann, Files  
FROM: Laurence Ashley  
SUBJECT: LONE STAR CEMENT COMPANY, SEATTLE  
  
DATE: May 23, 1974

State of  
Washington  
Department  
of Ecology



A water sample from the outfall from a settling pond  
at Lone Star Cement Company on May 20, 1974, was delivered  
to the laboratory for chemical analysis. The results:

SAMPLE	pH	Cu	Ni
		---mg/l---	
Leachate to Duwamish	10.7	<01	<.1

LA:js  
5-23-74 dt

USEPA SF



1261011

Department of Ecology  
State of Washington

WASTE DISCHARGE PERMIT  
Application Form

FOR OFFICE USE ONLY

New Permit	Type
Expired Permit No.	Permit No.
Drainage Basin	Rec'd
Advertising Needed	Issued
	Expired

Application is hereby made for a permit to discharge wastes into state waters and/or municipal sewerage systems in accordance with Chapter 90.48 RCW and Chapter 372-24 WAC.

- A. NAME OF COMPANY LONE STAR INDUSTRIES, INC.
- B. MAILING ADDRESS 3001 E. MARGINAL WAY S., SEATTLE, WA. 98134
- C. PLANT LOCATION (SAME ADDRESS AS ABOVE)
- PHONE 623-5546 CONTACT PERSON LEE B. BELKHAM
- D. TYPE OF INDUSTRY MANUFACTURE OF PORTLAND CEMENT
- E. WASTE FLOW: (Submit on separate sheet)

Describe in detail the sources, treatment and disposal of all liquid wastes at the plant, including water-process air pollution control equipment. Include a schematic flow diagram showing the sources and flow pattern of all wastes.

- F. SOLID WASTE DISPOSAL: (Submit on separate sheet)

Describe the types of solid wastes accumulated at the plant and list the source, volume, storage provision, frequency of removal, and final disposal of each solid waste. Include all sludges, dusts, scraps, trimmings and left-over, spoiled or returned products.

- G. WATER SUPPLY:

- ☐ Private well Recorded Water Right No. \_\_\_\_\_
- ☐ Surface Water N/A Recorded Water Right NO. \_\_\_\_\_  
(name of waterway)
- ☒ Public System SEATTLE WATER DEPARTMENT  
(name of system)

Location of private well or plant surface water intake; Section \_\_\_ Township \_\_\_ Range \_\_\_

- H. WASTEWATER DISPOSAL:

Maximum Gallons/Day

- ☐ To Land or Subsurface Ground Disposal \_\_\_\_\_
- ☐ To Surface Waterway \_\_\_\_\_  
(name of waterway)
- ☒ To Sanitary Sewerage System SEATTLE 900  
WATER DEPT. (COMBINED UTILITIES of municipal system)

Location of Discharge Point(s) and/or Connection(s) to Municipal Sewer System:

FOR LOCATIONS OF TWO SANITARY SEWER DISCHARGE CONNECTION POINTS TO MUNICIPAL SEWER

SYSTEM REFER TO GRIDS S10/5/W 3010 AND S1450/W3010 ON LSI DWG. I-WS-L-5.

AGC2H000521

I. WATER SUPPLY VOLUMES

Private Well  
Surface Water  
Public System

Average Gallons/D.

Maximum Gallons/Day

TOTAL

J. WASTEWATER AND WATER UTILIZATION:

Sanitary Wastes

Industrial Wastewater

Cooling Water Discharge

Water Incorporated into Product

Evaporative Loss

Other (Specify)

TOTAL

Average Gallons/Day

Maximum Gallons/Day

RECLAIMED IN THE SLURRY

RECLAIMED IN THE SLURRY

N/A

104,000

105,000

900

214,100

215,000

Check for Equality

K. EFFLUENT ANALYSIS: (Submit on separate sheet)

List the physical and chemical properties of the effluent(s) to be discharged, and include a description of the sampling and analytical methods used to derive this information.

N/A - NO EFFLUENT DISCHARGED INTO WATERWAY.

L. PLANNED WASTE TREATMENT IMPROVEMENTS: (Submit on separate sheet)

Describe any additional treatment or changes in waste disposal methods in planning or under construction.

None

M. STORMWATER TREATMENT AND CONTROL:

☒ No Treatment

☐ Treated Stormwater to Waterway

\_\_\_\_\_  
(name of waterway)

Contaminated Stormwater to Sanitary Sewer

☐ Size of Intercepted Area

\_\_\_\_\_ sq. ft.

Type of Treatment

☐ Settling or Sedimentation

☐ Screening or Filtration

☐ Separation or Flotation

Type of Treatment

☐ Settling or Sedimentation

☐ Screening or Filtration

☐ Separation or Flotation

Use Additional Sheets for Items N, O, P, and Q, if necessary.

N. PLANT OPERATION:	Days per Year	Number of Employees per Shift		
		Day	Night	Swing
Average	<u>355</u>	<u>1</u>	<u>12</u>	<u>15</u>
Maximum	<u>365</u>	<u>71</u>	<u>12</u>	<u>15</u>

O. RAW MATERIALS AND CHEMICALS USED IN PROCESSES:

Brand Name	Chemical, Scientific or Actual Name	Quantity Used per Day *	
		Average	Maximum
<u>LIMESTONE</u>	<u>LIMESTONE</u>	<u>100 TONS/DAY</u>	<u>1,000 TONS/DAY</u>
<u>SANDSTONE</u>	<u>SANDSTONE</u>	<u>105 TONS/DAY</u>	<u>150 TONS/DAY</u>
<u>BLAST FURNACE</u>	<u>SLAG</u>	<u>35 TONS/DAY</u>	<u>50 TONS/DAY</u>
<u>SLAG</u>			
<u>COAL</u>	<u>COAL (BITUMINOUS)</u>	<u>240 TONS/DAY</u>	<u>250 TONS/DAY</u>

P. PRODUCTION:

Item	Quantity Produced Per Day *	
	Average	Maximum
<u>CEMENT (ALL TYPES)</u>	<u>1250 TONS/DAY</u>	<u>2000 TONS/DAY</u>

Q. EXPLAIN ANY SEASONAL VARIATION IN WASTE DISCHARGE VOLUMES, PLANT OPERATIONS, RAW MATERIALS AND CHEMICALS USED IN PROCESSES, AND/OR PRODUCTION: NOT APPLICABLE

The information given on this application is complete and accurate to the best of my knowledge.

Lee B. Beckham  
Signature

LEE B. BECKHAM

Printed

ASST. PLANT MANAGER - E&M

Title

DECEMBER 13, 1961

Date

\*Please specify units. For example: Tons per day, pounds per day, barrels per day.

111  
100 ft<sup>3</sup>

$$\frac{7460}{5580080} = \frac{28}{28}$$

$$\frac{8700}{6507600} = \frac{20}{20}$$

$$\frac{7808}{5466384} = \frac{29}{29}$$

$$\frac{6476}{4844048} = \frac{34}{34}$$

$$\frac{5765}{431220} = \frac{27}{27}$$

$$\frac{3401}{4039946} = \frac{30}{30}$$

$$\frac{6329}{41734092} = \frac{28}{28}$$

$$\frac{4160}{3111680} = \frac{22}{22}$$

$$\frac{5759}{4307732} = \frac{32}{32}$$

AUG 12 thru SEPT. 9 }  $2700 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{20,197.35 \text{ gal}}{28 \text{ day period}} = 721.33 \text{ GPD}$   
199,286 GPD

JULY 13 thru AUG. 12 }  $3000 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{22,441.5 \text{ gal}}{30 \text{ day period}} = 748.05 \text{ GPD}$   
216,920 GPD

JUNE 14 thru JULY 13 }  $2800 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{20,944}{29} = 722.21 \text{ GPD}$   
188,496 GPD

MAY 11 thru JUNE 14 }  $1900 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{14,212}{34} = 418.00 \text{ GPD}$   
142,472 GPD

APRIL 14 thru MAY 11 }  $1600 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{11,968}{27} = 443.26 \text{ GPD}$   
159,712 GPD

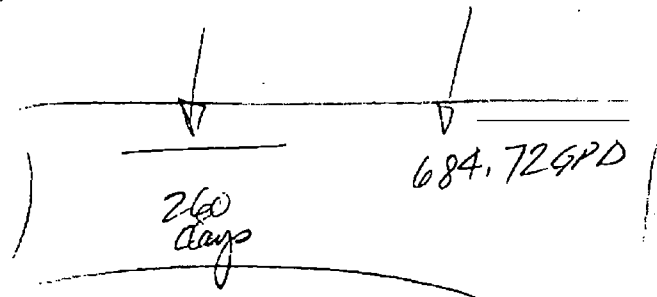
MAR 15 thru APRIL 14 }  $3400 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{25,432}{30} = 847.73 \text{ GPD}$   
134,665 GPD

FEB 15 thru MAR 15 }  $3400 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{25,432}{28} = 908.28 \text{ GPD}$   
1169,075 GPD

JAN 24 thru FEB 15 }  $2000 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{14,960}{22} = 680.00 \text{ GPD}$   
141,440 GPD

DEC 22 thru JAN 24 }  $3000 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = \frac{22,440}{32} = 701.25 \text{ GPD}$   
134,617 GPD

165,014



Subject: \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_  
 Cnkd. By \_\_\_\_\_ Date \_\_\_\_\_  
 Sheet No. \_\_\_\_\_ Of \_\_\_\_\_  
 AGC2H000524

$$\text{ACRES} \times 1076.39 = \text{ft}^2$$

$$26.4 \text{ acres} \times 1076.39 = 28,416.70 \text{ ft}^2$$

1975 -  $\frac{41.88''}{365} = 0.1147''/\text{day}$  on year avg. (.009566)  
1976 -  $\frac{27.49''}{365} = 0.0753''/\text{day}$  " " (.0062739/day/year)

$$28,416.70 \text{ ft}^2 \times .0095616 \text{ ft/day/year avg 1975} = 271.71 \text{ ft}^3/\text{day} \times \frac{7.48 \text{ gal}}{\text{ft}^3} =$$

---

$$2,032 \text{ GPD}$$

---

$$\text{for year 1975}$$

$$28,416.70 \text{ ft}^2 \times .0062739 \text{ ft/day/year Aug 1976} = 178.28 \text{ ft}^3/\text{day} \times 7.48 \text{ gal/ft}^3 =$$

$1333.56 \text{ GPD}$

for year 1976

$$\text{MAX } 2.41' / \text{day} (24 \text{ hr PD}) = 0.2008'$$

$$28,416.70 \text{ ft}^2 \times 2008 \times 7.48 = \underline{42,68143 \text{ gal/day MAX}}$$



**LONE STAR  
INDUSTRIES**

SEATTLE

WASHINGTON

Subject: \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_  
Chkd. By \_\_\_\_\_ Date \_\_\_\_\_  
Sheet No. \_\_\_\_\_ Of \_\_\_\_\_  
AGC2H000525

FL  
TI - 302.7 drawing

## FINISH CEMENT

		TPH OPT.	YEAR TO DATE
LSI TI	1975	60.0	71.12
	1976	60.0	72.14
		(1440 TONS/DAY)	} AVG. 71.63 TPH
			<u>1719.12 TONS/DAY</u>
LSI TII	1975	60.0	57.04
	1976	60.0	58.09
		(1440 TONS/DAY)	} AVG. 57.57 TPH
			<u>1381.68 TONS/DAY</u>
LSI TIII	1975	30.0	37.84
	1976	30.0	36.26
		(720 TONS/DAY)	} AVG. 37.05 TPH
			<u>889.20 TONS/DAY</u>
MASONRY	1975	10.0	8.40
	1976	10.0	8.39
		(240 TONS/DAY)	} AVG. 8.40 TPH
			<u>201.60 TONS/DAY</u>

1976 T.I+II+III  
finish

2433.75 x 52.94  
2036.25 x 58.96  
1318.00 x 57.72  
76.00 x 38.37  
1041.50 x 36.48

6905.50 = 52.98 / year all types

1975 T.I+II+III  
finish

2034 x 53.75  
2223 x 55.72  
1759.5 x 56.72  
189.25 x 38.93  
1108 x 34.57

7313.75 = 51.77 / year all types

2 year all types  
52.36 TPH.

x 24 =

1257 TPD



## RAINFALL FIGURES

1975 - 41.88 inches rainfall

1976 - 27.49 inches rainfall

69.37 inches 2 yr. period AIB. 34.685 inches.

$$26.4 \text{ acres} \times 1076.39 = 28,416.70 \text{ ft}^2 \times 2.89 \text{ ft} = 82,124.26 \text{ ft}^3$$

$$\frac{82,124.26 \text{ ft}^3 \text{ rainfall/year}}{.13368} = \frac{614,334.7 \text{ gal/year}}{365 \text{ days/year}} = 1,683.11 \text{ gal/day.}$$

year 1976 #1 F/M - 52.94 TPH  
#2 F/M - 58.96 TPH



**LONE STAR  
INDUSTRIES**

SEATTLE

WASHINGTON

Subject: \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_

Chkd. By \_\_\_\_\_ Date \_\_\_\_\_

AGC2H000528